



BTC 5349 SERIES KEYBOARD

USER'S MANUAL

FOR IBM & COMPATIBLE PC/XT/AT

April 20, 1990
Rev. D

FEDERAL COMMUNICATION COMMISSION GUIDELINES

Warning: This equipment has been certified to comply with the limits for a class B computing device, pursuant to subpart J of part 15 of FCC rules. Only computers and peripherals (computer input/output devices, terminals, printers, etc.) certified to comply with the class B limits may be attached to this keyboard. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

LIMITED WARRANTY

Behavior Tech Computer Corporation (BTC) makes the following non-transferable warranty to the original purchaser. The keyboard is warranted to be free from defects with normal usage for one year after purchase. During this period, you may return the defective keyboard for service under warranty.

If you need to return your keyboard for service under warranty, please repack it in the original packaging to protect the product from any shock or damage in shipment: Make sure that you do not remove the keyboard model and serial number label from the bottom of your keyboard. Send the keyboard to BTC at your own expense. It will be returned via prepaid UPS Surface. Your keyboard will be repaired free of charge promptly, subject to the availability of parts.

TRADEMARKS

IBM PC, XT, AT are registered trademarks of International Business Machines Corporation.

BTC is a trademark of Behavior Tech Computer Corporation and is registered in certain countries.

KEYSWITCH SCAN CODE

The keys shown in the code charts are compatible with the IBM personal computer PC, XT, and AT keyboards.

The bit assignments for each key are shown in the hexadecimal numbering system. Hexadecimal means 16 and is simply a shorthand notation used to express the binary bit patterns.

For the PC/XT, the break code of each key is transmitted as the make code plus 80. For example the make code of character "A" is 1E so its break code is 9E. All keys are typematic except the PAUSE key.

81 01	BB 3B	BC 3C	BD 3D	BE 3E	BF 3F	C0 40	C1 41	C2 42	C3 43	C4 44	D7 57	D8 58	①	C6 46	②
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	---	----------	---

A9 29	82 02	83 03	84 04	85 05	86 06	87 07	88 08	89 09	8A 0A	8B 0B	8C 0C	8D 0D	8E 0E	D2 52	C7 47	C9 49	C5 45	③	B7 37	CA 4A
8F 0F	90 10	91 11	92 12	93 13	94 14	95 15	96 16	97 17	98 18	99 19	9A 1A	9B 1B	AB 2B	D3 53	CF 4F	D1 51	C7 47	C8 48	C9 49	CE 4E
BA 3A	9E 1E	9F 1F	A0 20	A1 21	A2 22	A3 23	A4 24	A5 25	A6 26	A7 27	A8 28	AB 2B	9C 1C				CB 4B	CC 4C	CD 4D	
AA 2A	AA 2A	D6 56	AC 2C	AD 2D	AE 2E	AF 2F	B0 30	B1 31	B2 32	B3 33	B4 34	B5 35	B6 36				C8 48	CF 4F	D0 50	D1 51
EF 6F	9D 1D	9D 1D	B8 38	B8 38			B9 39					B8 38	B8 38	9D 1D	9D 1D	AB 2B	CB 4B	D0 50	CD 4D	

YY XX	YY: Break Code XX: Make Code	①	Print Screen Key Make Code: E0 2A E0 37 Break Code: E0 B7 E0 AA	②	Pause Key Make Code: E1 10 45 E1 9D C5 Break Code: None	③	/ Key Make Code: E0 35 Break Code: E0 B5
	Make/Break Codes Preceded by E0		Ctrl/Shift Case Make Code: E0 37 Break Code: E0 B7		Break Case Active only when is pressed with Ctrl key. Make Code: E0 46 E0 C6 Break Code: None		Left Shift Case Make Code: E0 AA E0 35 Break Code: E0 B5 E0 2A
	Shift Case Make Code: E0 AA E0 "Make Code" Break Code: E0 "Break Code" E0 2A		Alt Case Make Code: 54 Break Code: D4				Right Shift Case Make Code: E0 B6 E0 35 Break Code: E0 B5 E0 36
	Num Lock on Case Make Code: E0 2A E0 "Make Code" Break Code: E0 "Break Code" E0 AA						

For the AT, the break code of each key is transmitted as F0 followed by that key's make code. For example the make code of character "A" is 1C so its break code is F0 1C. All keys are typematic except the PAUSE key.

76	05	06	04	0C	03	0B	83	0A	01	09	78	07	①	7E	②
----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	---

0E	16	1E	26	25	2E	36	3D	3E	46	45	4E	55	66	70	6C	7D	77	③	7C	7B
0D	15	1D	24	2D	2C	35	3C	43	44	4D	54	5B	5D	71	69	7A	6C	75	7D	79
58	1C	1B	23	2B	34	33	3B	42	4B	4C	52	5D	5A				6B	73	74	
12	12	61	1A	22	21	2A	32	31	3A	41	49	4A	59				69	72	7A	5A
6F	14	14	11	11			29					11	11	14	14	5D	6B	72	74	

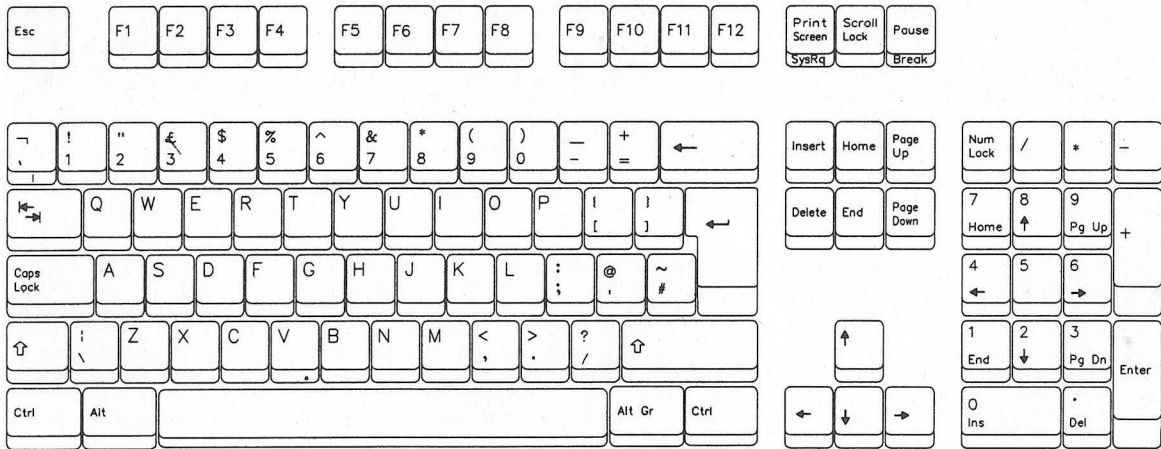
XX	XX: Make Code	①	Print Screen Key Make Code: E0 12 E0 7C Break Code: E0 F0 7C E0 F0 12	②	Pause Key Make Code: E1 14 77 E1 F0 14 F0 77 Break Code: None	③	/ Key Make Code: E0 4A Break Code: E0 F0 4A
	Make/Break Code Preceded by E0		Ctrl/Shift Case Make Code: E0 7C Break Code: E0 F0 7C		Break Case Active only when is pressed with Ctrl key. Make Code: E0 7E E0 F0 7E Break Code: None		Left Shift Case Make Code: E0 F0 12 E0 4A Break Code: E0 F0 4A E0 12
	Shift Case Make Code: E0 F0 12 E0 "Make Code" Break Code: E0 F0 "Make Code" E0 12		Alt Case Make Code: 84 Break Code: F0 84				Right Shift Case Make Code: E0 F0 59 E0 4A Break Code: E0 F0 4A E0 59
	Num Lock on Case Make Code: E0 12 E0 "Make Code" Break Code: E0 F0 "Make Code" E0 F0 12						

KEYBOARD LAYOUT

This keyboard has 102 keys. Please use the appropriate conversion program "KEYB XX" (on DOS3.3 diskette) to select the desired keyboard layout as below:

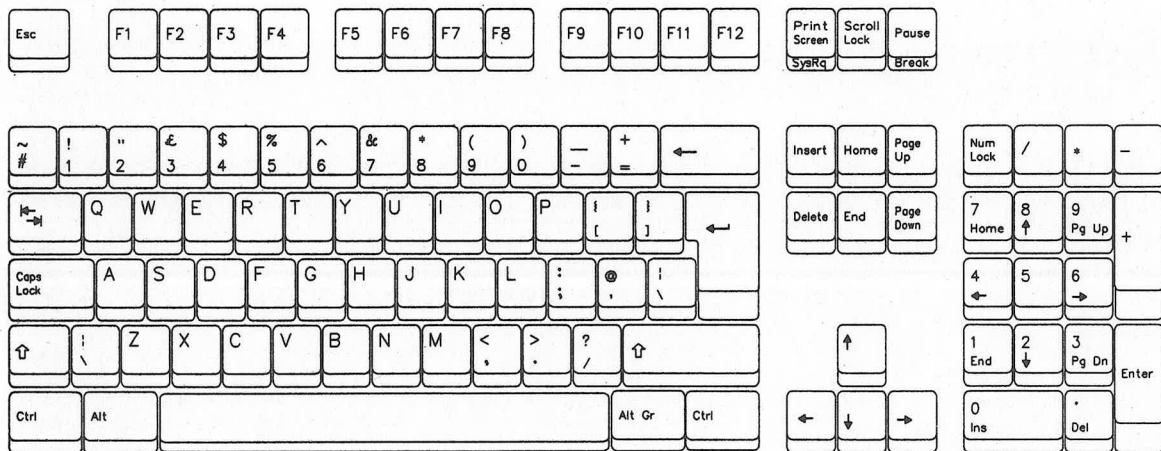
U.K. ENGLISH

* AT Compatible



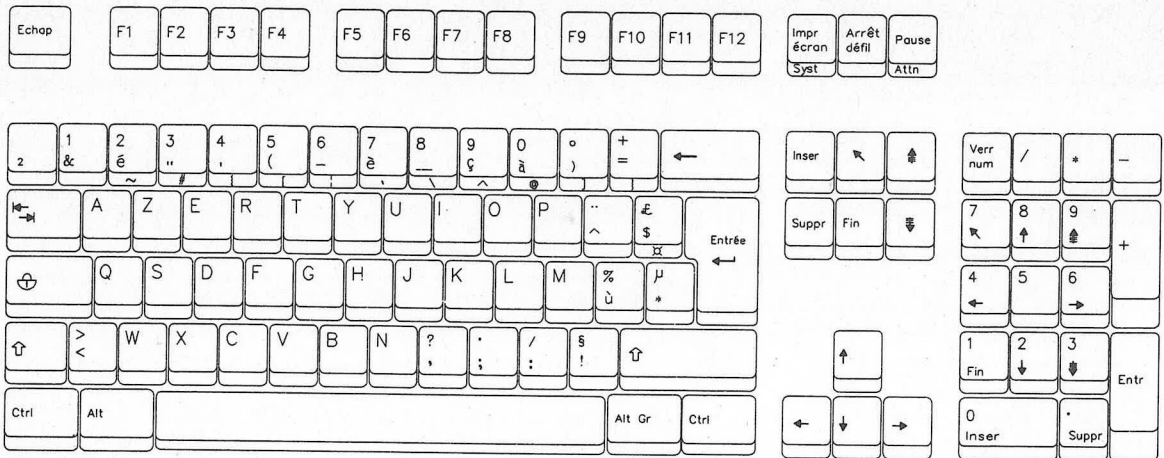
U.K. ENGLISH

* PC/XT Compatible



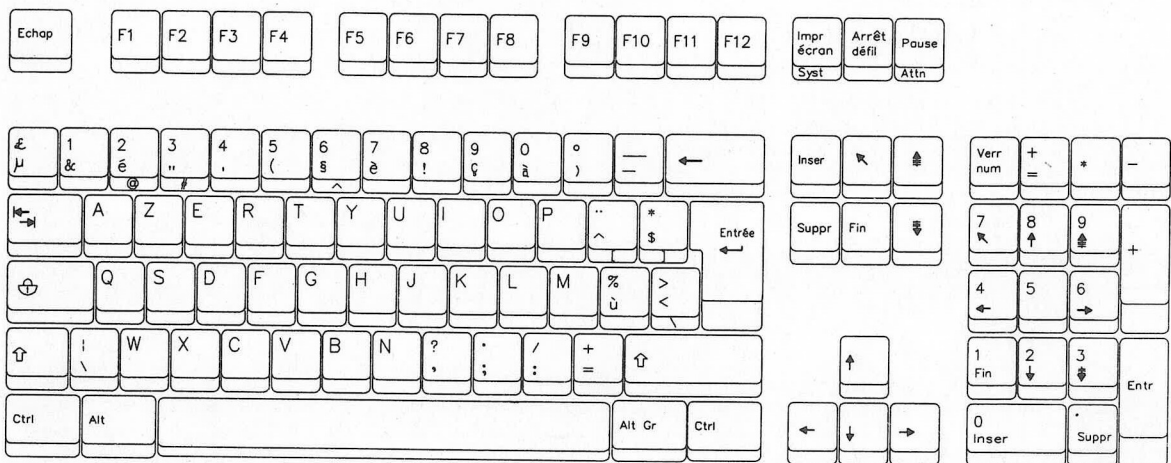
FRENCH

* AT Compatible



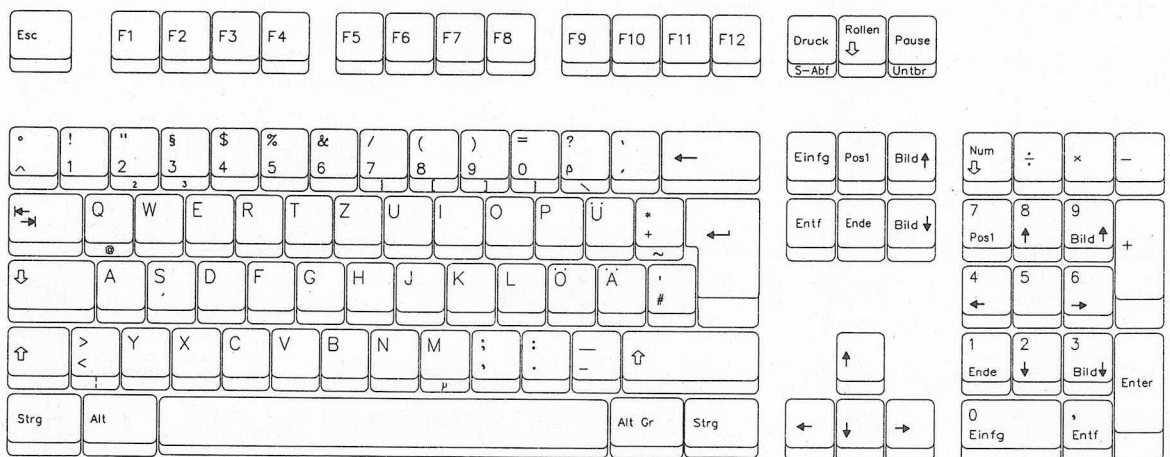
FRENCH

* PC/XT Compatible



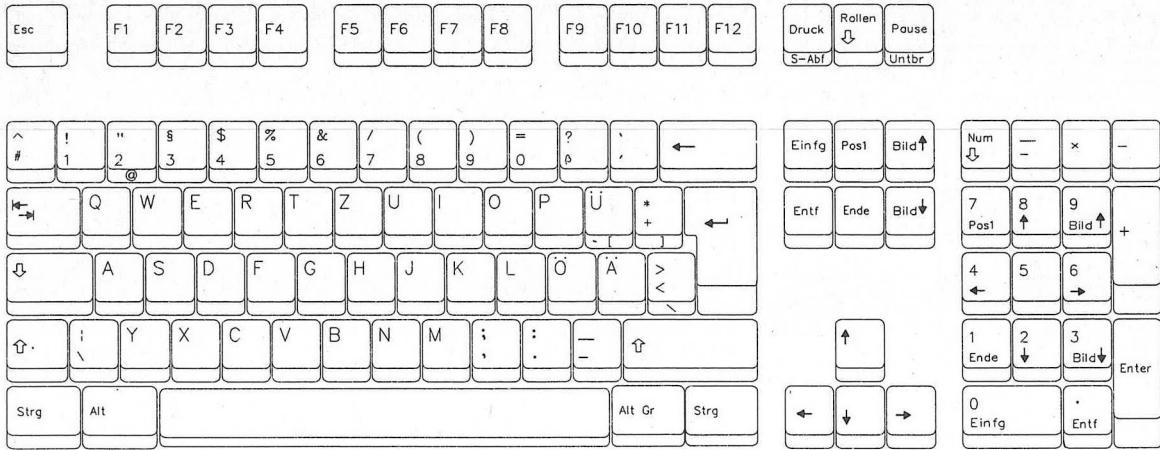
GERMAN

* AT Compatible



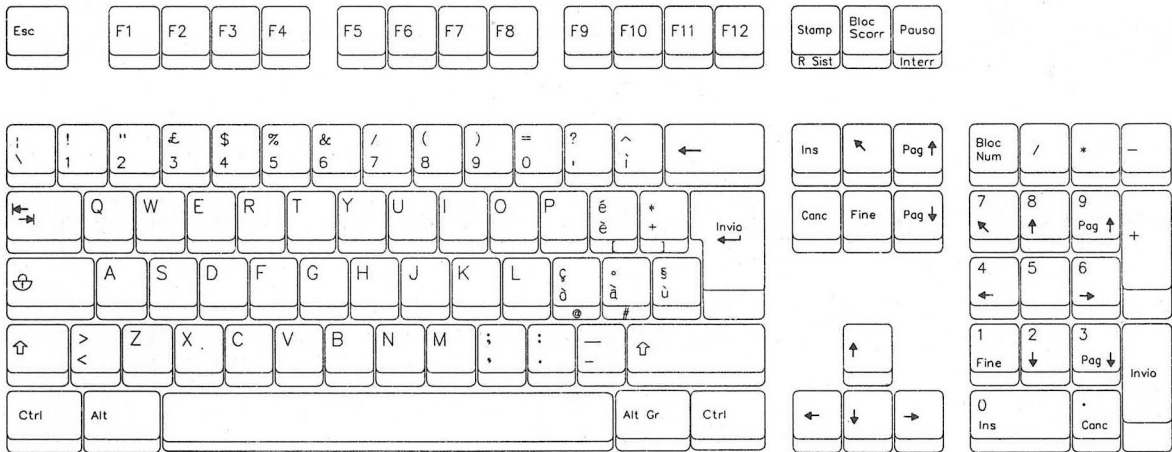
GERMAN

* PC/XT Compatible



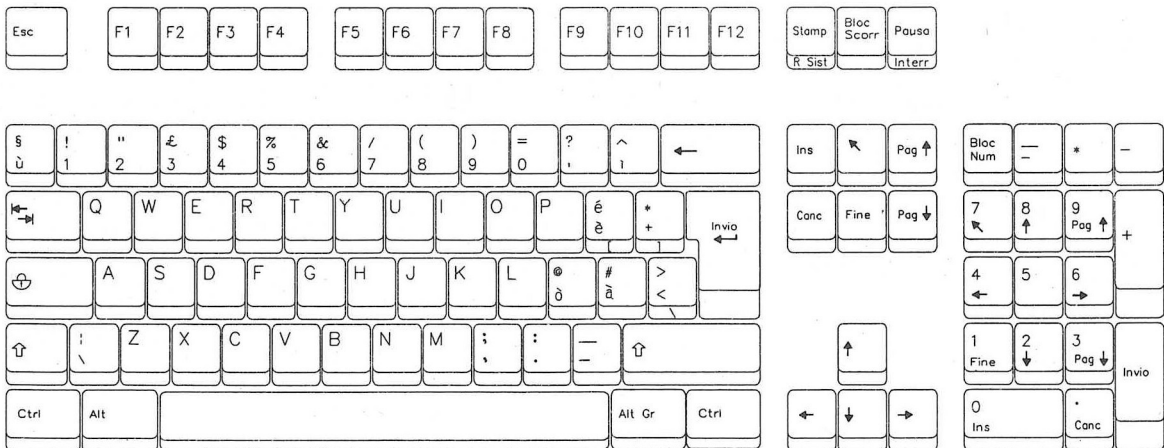
ITALIAN

* AT Compatible



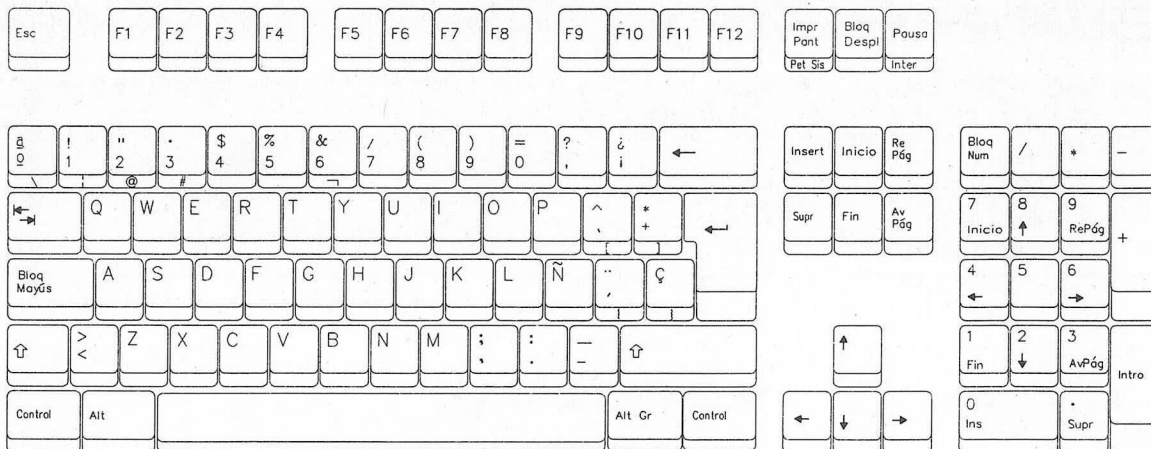
ITALIAN

* PC/XT Compatible



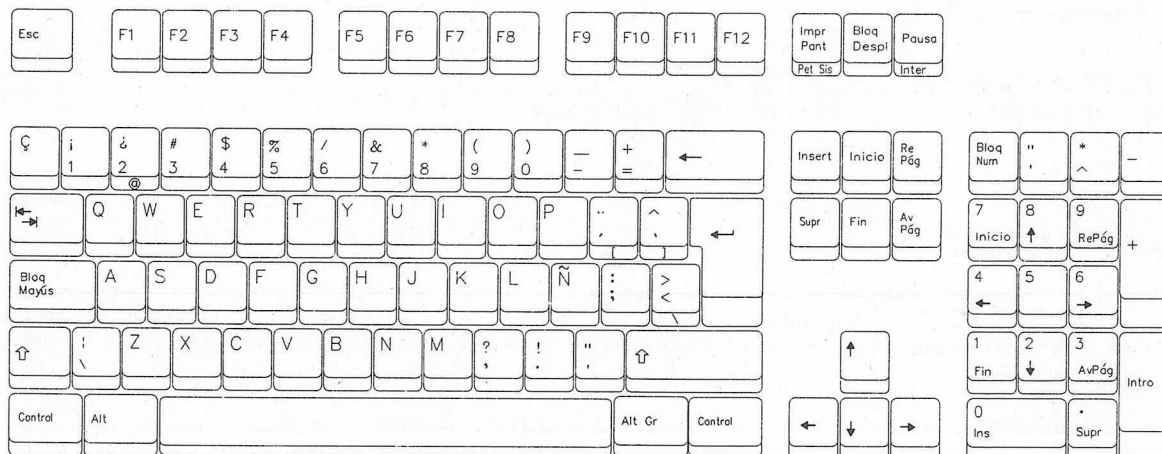
SPANISH

* AT Compatible



SPANISH

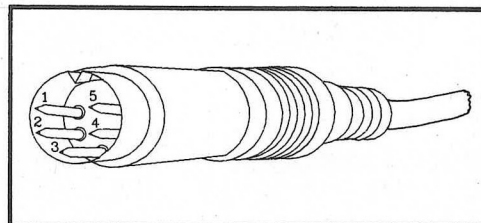
* PC/XT Compatible



KEYBOARD CABLE CONNECTOR

PC, XT, AT Compatible Cable

Pin#	Signal Name	Voltage
1	Keyboard Clock	+5VDC Signal
2	Ground	0
3	Keyboard Data	+5VDC Signal
4	Power Supply	+5VDC
5	No Connection	



TECHNICAL DATA

POWER REQUIREMENT

+5 VDC @240 mA nominal

ENVIRONMENTAL DATA

Operating temperature : 0°C to 55°C
Relative humidity : 20% - 95% non-condensing
Altitude : -1000 ft. to 10000 ft.

MECHANICAL DATA

Model No.	5349	5349S	5349R	5349T
Total Travel	3.9 +/- 0.5 mm			
Pretravel	1.9 +/- 0.5 mm			
Operating Life	50 mega cycles min. per key		10 mega cycles min. per key	
Peak Load before Make (normal key)	40 $\begin{smallmatrix} +15 \\ -10 \end{smallmatrix}$ grams		55 +/- 10 grams	
Length	490 mm	470 mm	470 mm	490 mm
Width	210 mm	180 mm	180 mm	210 mm
Height	40 mm	40 mm	40 mm	40 mm
Weight	2 kg	1.4 kg	1.4 kg	2 kg



3100500280